

IN THE CLAIMS:

Please amend the claims as set forth hereinbelow and in the attached appendix:

3. (Amended) Method according to claim 1, characterized in that the beam proceeding from the point is split into optical paths of different lengths through optical elements that are distributed in front of a sensor.

4. Method according to claim 1, characterized in that flat face-plates of different thicknesses, which are arranged in a matrix shape, can be used as the optical element.

A
5. (Amended) Method according to claim 1, characterized in that the sensor or its working field is divided into several measuring areas for simultaneous distance measuring of various areas of the object.

6. (Amended) Method according to claim 1, characterized in that the respective contrast distribution is adapted to a parabola, whose vertex corresponds to a contrast value, at which the point to be measured is sharply depicted on the working plane of the corresponding sensor.

7. (Amended) Method according to claim 1, characterized in that the contrast distributions, which are allocated to the optical paths with different lengths, run in an overlapping manner in such a way that in the measuring area contrast values are determined from a minimum number of contrast

distributions for a distance that is to be measured, with this number being sufficient for calculating the contrast distribution for the sensor or optical path for a sharp depiction of the point to be measured via the selected optical path to the sensor.

8. (Amended) Method according to claim 1, characterized in that an image sensor or a multiple-chip camera is used as the sensor.

9. (Amended) Method according to claim 1, characterized in that the sensor is coupled with a position control loop of a CNC control system for the point-by-point scanning measurement of a surface of the object.

10. (Amended) Method according to claim 1, characterized in that for the purpose of achieving optical paths with different lengths, the beam proceeding from the point penetrates a piezo-electric plate, which is arranged in front of a sensor.

11. (Amended) Method according to claim 1, characterized in that the beam proceeding from the point penetrates flat face-plates of different thicknesses that are arranged on a rotating disk.

12. (Amended) Method according to claim 1, characterized in that the beam proceeding from the point is directed via a tilting mirror to at least three sensors.

13. (Amended) Method according to claim 1, characterized in that the beam proceeding from the point penetrates a lens package of a zoom lens of the optical sensor.

A/ 14. (Amended) Method according to claim 1, characterized in that the optical sensor is arranged on a fastening device that comprises a piezo-element to be able to change the distance to the point.

15. (Amended) Method according to claim 1, characterized in that the beam proceeding from the point penetrates a CCD layer with pixel areas deviating from one another.

18. (Amended) Device according to claim 16, characterized in that in front of the one sensor (14, 20, 22), optical elements are arranged for splitting the beam proceeding from the point (10) into optical paths of different lengths.

A/ 2 19. (Amended) Device according to claim 16, characterized in that flat face-plates of different thicknesses, arranged matrix-like, are used as the optical element.

20. (Amended) Device according to claim 16, characterized in that the sensor (14, 20, 22) or its working field is divided into several measuring areas for simultaneous distance measuring of various areas of the object (12).

21. (Amended) Device according to claim 16, characterized in that the sensor (14, 20, 22) is an image sensor or a multiple-chip camera.

22. (Amended) Device according to claim 16, characterized in that the sensor (14, 20, 22) is coupled with a position control loop of a CNC control system for the point-by-point scanning measurement of a surface of the object (12).

23. (Amended) Device according to claim 16, characterized in that for the purpose of achieving optical paths with different lengths, the beam proceeding from the point penetrates a piezo-electric plate arranged in front of a sensor (14, 20, 22).
A2

24. (Amended) Device according to claim 16, characterized in that in front of the sensor (14, 20, 22) a rotating disk, which is penetrated by the beam, is arranged, on which flat face-plates of different thicknesses are located.

25. (Amended) Device according to claim 16, characterized in that the device contains a tilting mirror, from which the beam proceeding from the point (10) can be directed to at least three sensors (14, 20, 22).

26. (Amended) Device according to claim 16, characterized in that the sensor (14, 20, 22) is equipped with a lens package of a zoom lens, which can be penetrated by the beam.

27. (Amended) Device according to claim 16, characterized in that the optical sensor (14, 20, 22) is arranged on a fastening device that comprises a piezo-element to be able to change the distance to the point (10).

AZ

28. (Amended) Device according to claim 16, characterized in that the beam proceeding from the point (10) penetrates a CCD layer with pixel areas deviating from one another.